

is negative and 63.6% (14/22) when the sentinel lymph node is positive. This is in comparison to MSLT's findings of 9.7% (62/642) when the SLN is negative and 26.2% (32/122) when the SLN is positive.

**Conclusions:** Our identification rates and incidence of positive nodes are comparable to MSLT. However our false negative and mortality rates fall short of these standards. The procedure of SLNB should correctly identify the SLN, and this failure rate has prompted us to consider other forms of identification of the SLN such as PET and CT scanning. We will continue to audit our outcomes.

#### 0810: HAND INFECTIONS – HOW DEEP IS THE PROBLEM?

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**Aim:** Hand infections can be broadly anatomically defined as superficial or deep with important clinical implications. This study aims to determine the most likely pathogen responsible in each type in order to provide optimum treatment, aiding successful eradication of the causative bacterium.

**Method:** The microbiology database of Sheffield Teaching Hospitals was retrospectively accessed from 2006 to 2012 using specific search criteria to capture all hand infection data. Patients with both superficial and deep positive cultures for one episode of infection were manually selected.

**Results:** 23/5531 patients were identified with positive cultures at both anatomical planes. The most common organism overall was Methicillin-sensitive *Staphylococcus aureus* (MSSA), followed by *Streptococci* and anaerobes. MSSA had the highest incidence in both superficial and deep swab cultures. 22/23 (96%) patients had superficial and deep cultures with matching bacterial profiles. Antibiotic assays for MSSA show that based on superficial cultures, 52% of patients should respond to Flucloxacillin, likewise 61% of patients with deep cultures.

**Conclusions:** Our results show that Flucloxacillin is the most suitable antibiotic for hand infections, in both superficial and deep planes of infection. Furthermore, in either case, addition of Penicillin and Metronidazole should be considered for coverage of *Streptococci* and anaerobes respectively.

#### 0816: THE USE OF VENOUS COUPLER DEVICE IN END TO SIDE ANASTOMOSES IN HEAD AND NECK FREE TISSUE TRANSFER (FTT)

Billy Wong, Nakul Patel, Amer Durrani. Cambridge University Hospital NHS Trust, Cambridge, UK.

**Introduction:** The use of venous anastomosis coupling systems is routine in microvascular FTTs. Venous end-to-side anastomosis using a couple device has not been well established. The head and neck region is therefore unique in that the internal jugular veins provide a large calibre which allows end-to-side anastomoses.

**Aim:** To demonstrate the feasibility, safety and efficacy of venous end-to-side anastomoses in head and neck reconstructions.

**Material and Methods:** A retrospective review of 41 consecutive head and neck free flap reconstructions performed at by the senior surgeon over one year were reviewed. Patients' demographic features including age, gender, and tumor location, type of FTT, recipient vessels, and coupling device diameter were collected. Complications of the free tissue transfer were noted.

**Results:** A total of 12 end-to-side anastomoses were undertaken in 9 patients. Of which, 6 were critical anastomoses (only venous anastomosis for a given free flap). The venous calibre ranges from 2.5mm to 4.0mm. There were no anastomotic or flap related complications in our series.

**Conclusion:** End-to-side anastomosis using the internal jugular is a safe and effective in appropriately selected patients.

#### 0828: EARLY EXPERIENCE OF LIP VOLUME ENHANCEMENT USING A NEW PRODUCT AND NEW TECHNIQUE

Kerry Davies, Dionysia Vasdeki, Taimur Shoaib. Canniesburn Plastic Surgery Unit, Glasgow, UK.

**Introduction:** We investigated the use of a new product Volbella using a technique hypothesized to create volume with reduced bruising. Ten patients were treated. Filler was injected into the junction of the wet lip and the dry lip at the junction between the orbicularis oris muscle with the sub-labial fat.

**Methods:** Pre and post filler questionnaires were recorded and results tabulated. Four doctors reviewed pre and post-treatment photographs regarding bruising and lip volume. Mean filler volume for each of the ten subjects was assessed using both the Medicis Lip Fullness Scale and the Photonic scale. Mean values and the change in lips volumes were calculated.

**Results:** Patient satisfaction was high, pain was minimal and bruising was almost completely eliminated allowing an immediate return to normal function without the need for camouflage.

Mean pre-filler volume of the upper lip was 2.5 and lower lip was also 2.5. Mean post-filler upper lip was 3.0 and lower lip 3.5. There was a 0.5 increase overall in lower lip volume ( $p < 0.001$ ) and 1.0 for the lower lip ( $p < 0.001$ ).

**Conclusion:** Our initial experience with Volbella as a lip filler using this technique is favourable and we encourage further long-term studies to determine long-term satisfaction.

#### 0833: E-LINK HAND THERAPY: PATIENT IMPACT

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**Introduction:** E-link is a complimentary rehabilitation tool used by the Hand Therapy Clinic (HTC) at Pinderfields Hospital, Wakefield. It is used in combination with occupational therapy and physiotherapy for a variety of hand and wrist trauma patients. This computer based rehabilitation therapy, engages patients using simple games to evaluate and improve grip strength.

**Method:** Treatment is provided over a 4-week period, after which the patient is reviewed at the HTC. If improvements in function are seen a further 4-week therapy schedule is arranged. Patient data is recorded measuring various pinch/grip strengths and range of movements across joints.

**Advantages:** E-link is a flexible rehabilitation method that can be tailored to specific patient needs, thus appropriate for a wide spectrum of injuries. Many grip strengths, commonly pinch grip and gross grip, are improved using this programme. Patients see improvements in their scores over time, which provides quantifiable positive feedback.

**Conclusions:** We find this programme a useful adjunct to the hand therapy programme. It is simple to use, tailored to specific functions required by individuals and a useful motivation tool. This programme also makes functionally targeted occupational therapy simpler and more efficient as long workshop sessions are usually not required.

#### 0849: THE RECONSTRUCTIVE APPROACH FOLLOWING SKIN CANCER EXCISION ON THE LOWER LIMB: IS FLAP CLOSURE PREFERABLE TO SKIN GRAFTING?

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**Aim:** Skin cancer excision may result in a deficit that cannot be closed directly, requiring reconstruction using a local flap or skin grafts. We compared the post-operative outcomes of flap and graft repair for skin cancer excision on the lower limb (ankle to knee).

**Method:** All skin cancer excision, receiving either flap or graft repair, performed in the last 5 years on the lower limb in St Andrews Centre (Mid Essex Hospital Services NHS Trust), were identified. Malignant melanoma cases were excluded as these require further treatment. Patient demographics, co-morbidities, lesion characteristics and post-operative complications (infection, readmission, failure and delayed wound healing) were identified and compared between the flap and graft repair groups.

**Results:** 789 skin cancer lesions were repaired using either flap or skin graft in the last five years. 149 cases (77 flaps, 72 grafts) were identified for analysis. In the flap repair group 26.0% of cases noted post-operative complications compared to 43.1% in graft repair group ( $p < 0.03$ ). Failure rate was significantly higher in the graft repair group than the flap repair group (20.8% vs. 9.09%;  $p = 0.04$ ).

**Conclusions:** Flap repair after skin cancer excision is preferable compared to graft repair due to a lower rate of post-operative complications.

#### 0866: CURRENT OUTCOMES IN THE SURGICAL MANAGEMENT OF PAEDIATRIC DYSPLASTIC NAEVI

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**Introduction:** Dysplastic naevi (DN) have an associated risk of malignant melanoma (MM), which increases with increasing numbers of DN and personal/family history of DN. No agreed national management standards exist.

Suggested standards:

1. Surveillance <sup>3</sup>1 per year with family/personal history of MM and/or personal history of  $\geq 3$  DN
2. Lesions should be excised with a 2mm margin if MM cannot be ruled out
3. All patients with DN are taught self-examination

**Methods:** We completed a retrospective study at four plastic surgery units in the South West. All patients  $\leq 16$  years with a histological diagnosis of DN or MM were evaluated.

**Results:** 42 lesions in 40 patients, mean age 11 years were analysed over a 10-year period. 86% underwent excision biopsy; 68% of these were excised with a 2mm margin. 20 patients were followed-up, mean duration 9 months. 5% of all lesions excised were found to be MM. 13% of patients discharged had documented discussion about self-examination.

**Conclusions:** The benefits and costs associated with out-patient surveillance in this patient cohort remain controversial. We recommend suspicious lesions are excised with a 2 mm margin. Self-examination should be advocated and documented for all patients. National standards are required to standardize management.

## 0869: TEN-YEAR EXPERIENCE OF MANAGING ECTROPIONS AT A SINGLE CENTRE IN SCOTLAND

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**Introduction:** This study presents the outcomes of ectropion treatment at the Canniesburn Plastic Surgery Department Glasgow.

**Method:** Patients with ectropion were identified retrospectively from the theatre database between 1998–2008. Case notes were searched for clinical information looking at aetiology, ectropion classification, recurrence rates and complications as primary outcomes.

**Results:** Underlying aetiology consisted of fifty-six secondary to skin cancer, four cases post-burns injury, five cases due to facial palsy, five cases from benign causes, five cases from trauma and four of unknown aetiology. Documentation of ectropion classification was poor with fifty patients (63%) having no classification specified. Of the seventy-nine patients, 53% were treated with a single procedure. 37% required 2–4 operations and 10% required 5 or more operations. High re-operation rates were noted in the facial palsy (80%) and skin cancer (11%) cohort. Complications included six infections (8%) and two wound dehiscence (3%).

**Conclusion:** Ectropion was poorly classified and documented in patient notes. Surgical treatment was associated with a recurrence rate of 47%, with high frequency of re-operations noted in facial palsy and skin cancer groups. Accurate classification of ectropion may help in stratifying surgical management according to ectropion type and underlying aetiology.

## 0930: THE EFFECTS OF THE LOW PRIORITY PROCEDURE POLICY ON PRACTICE AND TRAINING

Marnie Fullarton, Debbie Hunt, Kate Williams, Saif Rhobaye, Ali Juma. Countess Of Chester Hospital, Chester, UK.

**Aim:** In 2010 the Department of Health introduced the Low Priority Procedure (LPP) policy. This targets certain cosmetic operations in Plastic surgery and sets strict criteria on whether patients are offered surgery. We investigated if this policy has reduced our case load.

**Method:** LPP referrals from 2005–2012 were reviewed. Referral date, demographics, PCT, operation date and where appropriate reasons for refusal of surgery were recorded.

**Results:** 784 referrals for LPP were received, 673 were female and 141 male. Of the 784, 313 had surgery: 72 breast reductions, 68 breast augmentations, 55 removal/exchange breast implant, 34 pinnaplasty, 33 abdominoplasty, 13 blepharoplasty, 11 gynaecomastia excisions, 7 rhinoplasty and 20 others. Operations fell from 45 in 2007 to 26 in 2012. Abdominoplasty and cosmetic breast surgery have reduced most over this time. The commonest reason for refusal was not fulfilling PCT criteria. Interestingly LPP referrals have not reduced since 2010 when the policy was introduced.

**Conclusion:** Since LPP our case load has reduced. How this impacts on specialist training is under review by Sir Bruce Keogh. The Welsh model of

screening all LPP referrals nationally has been effective since 2004. This model could reduce the number of inappropriate referrals if introduced to England.

## 0934: FROM GUIDELINES TO STANDARDS OF CARE: INCREASING WORKLOAD, BUT DIMINISHING PATIENT BURDEN IN OPEN TIBIAL FRACTURES

Shakeel Rahman, Ryan Trickett, Ian Pallister. Morriston Hospital, Swansea, UK.

**Background:** Coordinated ortho-plastic surgery is the standard of care for open tibial fractures, aiming to minimise complications and unplanned revision surgery.

**Aim:** To establish whether the BOA/BAPRAS standards of care have altered referral pattern, workload and patients' surgical burden.

**Methods:** Two cohorts were reviewed, Guidelines (pre-2009) and Standards (2009–2011). Comparison was made between patients directly admitted (DAP) and transferred (TP) for the first 30 days post injury.

**Results:** The admission rate increased from 2.7/month (Guidelines) to 4.0/month (Standards). The percentage of TP rose from 30% to 77%. In both time periods, TP required significantly more operative procedures than DAP. With early coordinated care, the DAP group have undergone less mean operations (2.9 to 1.7). Those referred outside the terms of guidelines or standards - limb salvage (LS) - have the highest amputation rate.

**Conclusions:** Implementation of the standards has significantly increased the workload and the efficiency of care for open tibial fractures in our Ortho-Plastic Unit. Long-term follow up is needed to determine if efficiency equals efficacy. A small group of mainly elderly patients (LS) highlight the importance of early referral, as even seemingly 'simple' cases can prove to be catastrophic.

## 0946: CLINICAL AND FINANCIAL IMPLICATIONS FOLLOWING AN EARLY DISCHARGE PROTOCOL FOR REGIONAL NODE DISSECTIONS FOR SKIN CANCER – THE FRENCHAY HOSPITAL ALGORITHM

Guirgis Awad, Shaheel Chummun, Antonio Orlando. Frenchay Hospital-North Bristol NHS Trust, Bristol, UK.

**Introduction:** At Frenchay Hospital, we have developed a protocol for the discharge of patients following lymph node dissection (LND) for skin cancer within 72 hours post-operatively. This study reviews the outcome of the new discharge algorithm and any financial benefits incurred.

**Methods:** Data was collected on the demographics and outcome of 50 consecutive patients operated by a single surgeon for LND for skin cancer, over a 16 months period. We also reviewed the length of hospital stay and any savings made.

**Results:** 50 patients (31M: 19F) with a mean age of 66.1 years were recruited. 22 axillary, 15 neck and 13 groin dissections were performed. 62% of patients were operated upon within 2 weeks of being seen in clinic. The mean hospital stay was 1.9 days, compared to 9.5 days prior to the new discharge algorithm and single surgeon operator. The complication rate reduced from 50% to 24%. Financially, this resulted in 380 bed days saved over 16 months, equating to a saving of £83,600 (@£220/bed day).

**Conclusion:** The presented algorithm is an efficient and safe pathway from consultation to safe discharge, with the reduction in hospital stay and significant financial gains.

## 0964: MICROSURGICAL TRAINING – A LARGE CENTRE EXPERIENCE

Daniel Bernard Saleh, Richard Pinder, Mark I. Liddington. Leeds General Infirmary, Leeds, UK.

**Introduction:** Microvascular surgery is now a key skill, rather than subspecialty of reconstructive surgery. No studies have compared the authentic training experience with that of trainer surgeons.

**Methods:** A retrospective database review on consecutive free flaps performed between 1995–2010 were reviewed. Microvascular success, failure and the incidence of microvascular complication were analysed and compared. A trainee procedure was deemed both flap harvest and microvascular reconstruction.

**Results:** Trainees performed 11% of the total case load (188/1709). Total failure rate was 4.3% for consultants versus 7.2% ( $P>0.05$ ). Re-exploration of vascular anastomosis was 11% versus 7% ( $P>0.05$ ) for trainee and consultant respectively. Intra/post-operative microvascular problems